

## MEMORANDUM

TO: WSDOT Maintenance Personnel

FROM: Chris Christopher, State Maintenance Engineer

DATE: February 1, 2006

SUBJECT: 2005 Maintenance Customer Survey

This memorandum serves to transmit the final report of a customer survey conducted in October 2005 that evaluated customer satisfaction of state highway maintenance activities in Washington State. The 2005 customer survey follows a similar survey that was conducted in 2000.

The results of the customer survey represent some performance measurement information that can be used by maintenance managers in delivering the highway maintenance program in a manner that strives towards customer satisfaction. As the survey questions were fairly general in nature and directed towards a statewide audience, the results should not be used as the *sole* basis for any significant changes in program direction. Rather, the customer survey results should be utilized in conjunction with other tools and resources (i.e. MAP Level of Service data) that are available to support the professional judgment of maintenance managers.

Overall, the positive ratings of this customer survey demonstrate that the public is generally satisfied with the Highway Maintenance Program. The survey provides some additional information that can be helpful to maintenance managers as they continue delivering the program and seeking out opportunities for improvement.

**WSDOT Maintenance Customer Survey  
Summary Report**

**November 18, 2005**

**Prepared for:  
Washington State Department of Transportation Maintenance Office**

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## EXECUTIVE SUMMARY

### Purpose:

The Washington State Department of Transportation (WSDOT) was interested in evaluating customer satisfaction with state highway maintenance activities. In order to obtain public input, information regarding perceptions of maintenance activities in general, and public priorities in particular needed to be obtained. In addition, WSDOT wanted to compare customer perceptions in 2005 with those from the year 2000 survey, thereby allowing for a trend analysis.

### Methodology:

PRR was contracted to develop, implement and analyze data from a statistically valid telephone survey administered to residents of the State of Washington. PRR in consultation within WSDOT:

- Developed a statistically valid telephone survey of Washington State residents
- Pre-tested the survey and made necessary revisions before final fielding
- Fielded the telephone survey to a random sample of 802 Washington State residents who drive 50 or more miles per week on state highways (divided into three geographic regions)

### Key Results:

- Most drivers (79%) are satisfied with highway maintenance.
- The topic of roadway surfaces is still the number 1 improvement desired.
- A gap analysis was performed by determining how satisfied respondents were with WSDOT maintenance activities, and how important the respondents reported those activities to be to them. By subtracting the mean satisfaction score from the mean importance score, either a positive or negative gap score is created (unless the two means are equal). The maintenance activities with the highest *negative* gap scores would be the activities viewed as top priorities by the respondents.
  - The one area where WSDOT is exceeding the respondents' expectations (with the exception of in eastern Washington) is the maintenance of roadside vegetation (how plants, grasses, flowers by the roadside appear).
  - The largest negative gap scores for the state as a whole (and particularly for those in western urban and western non-urban Washington) was the condition of roadway surfaces. This was also the case in 2000.
  - Also consistent with the 2000 survey are the following other maintenance activities with large gap scores:
    - Snow and ice removal (in eastern and western non-urban Washington)
    - Road stripes and pavement markings (in eastern and western urban Washington)
    - Maintaining drainage (in western urban and non-urban Washington)
- Significant trends since 2000 are as follows:
  - Satisfaction with maintaining roadway surfaces increased

- Satisfaction with maintaining rest areas decreased
- The importance of maintaining roadway surfaces has decreased
- The importance of maintaining drainage has decreased
- The importance of roadside vegetation has increased
- The importance of maintaining traffic signals has decreased
- The importance of maintaining rest areas has decreased
- The following issues emerged as desired maintenance improvements :
  - Have better, more regular cleaning of roadside litter (20%)
  - Improve lighting (14%)
  - Road surfaces have grooves, ridges, ruts, and potholes (11%)
  - In general, people want better, more consistent, and more frequent maintenance (11%)
- The majority of respondents (54%) rate maintenance above average or excellent. However, since 2000, the rating of overall maintenance has decreased.
- Response to emergencies is highly rated (24% *excellent*, 36% *above average*).
- Majority (61%) rates state highways better maintained than local roads.
- Maintenance of WA state highways rated better than other states' by almost half (47%). However, since 2000, ratings of WA state highways have decreased.
- Continued use of herbicides to manage roadside vegetation approved by more than two-thirds (69%).
- Most (92%) have not contacted WSDOT about maintenance issues.

## I. Purpose

The Washington State Department of Transportation (WSDOT) was interested in evaluating customer satisfaction with state highway maintenance activities. In order to obtain public input, information regarding perceptions of maintenance activities in general, and public priorities in particular needed to be obtained. In addition, WSDOT wanted to compare customer perceptions in 2005 with those from the year 2000 survey, thereby allowing for a trend analysis.

PRR was contracted to develop, implement and analyze data from a statistically valid telephone survey administered to residents of Washington State who drive on state highways at least 50 miles per week. The survey results provided representative data on the following survey objectives:

- Satisfaction with and importance of highway maintenance activities
- Priorities for improved maintenance
- Attitudes towards issues specific to Washington State that may impact highway maintenance

This report summarizes the results of the 2005 survey, as well as comparisons to the 2000 survey.

## II. Methodology

PRR in consultation with WSDOT:

- Developed a statistically valid telephone survey of Washington State residents from three geographic areas (see survey in Attachment A)
- Pre-tested the survey and made necessary revisions before final fielding
- Fielded the telephone survey to a sample of 802 Washington State residents

## III. Sample

A random digit dial sample<sup>1</sup> for Washington State (n=11,374) was purchased through *Survey Sampling*. Potential respondents in each of the three geographic areas were randomly selected from the sampling frame for inclusion in the telephone survey. A disproportionate, stratified random sample (stratified by the three geographic areas) was used. This stratification allowed for a final sample that had an overall margin of error of  $\pm 3.46$  percent and had sufficient numbers of respondents from each of the three geographic areas to produce within each area a margin of error of  $\pm 6$  percent. The final sample of 802 drivers were randomly selected with the following quotas operating:

- One-third of the sample was called “Western Non-urban,” and it included the following counties: San Juan, Island, Whatcom, Skagit, Clallam, Jefferson, Kitsap, Grays Harbor, Mason, Thurston, Pacific, Wahkiakum, Lewis, Cowlitz, Clark, and Skamania.

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<sup>1</sup> To ensure that those with unlisted telephone numbers could be included.

- One-third of the sample was called “Eastern,” and it included the following counties: Okanogan, Chelan, Kittitas, Yakima, Klickitat, Douglas, Grant, Benton, Franklin, Walla Walla, Columbia, Garfield, Asotin, Whitman, Adams, Lincoln, Spokane, Ferry, Stevens, and Pend Oreille.
- One-third of the sample was called “Western Urban,” and it included Pierce, King and Snohomish Counties.

In order to reduce sample bias, up to six attempts per potential respondent were made to establish telephone contact at different times of the day and different days of the week. The person in the household who reported driving on a state highway 50 miles or more per week was interviewed. If no one in the household drove that distance on a weekly basis, then no one from that household was interviewed. The survey took on average ten minutes to complete. The response rate was 19%.<sup>2</sup>

#### IV. Data Processing and Analysis

Data processing consisted of coding and entering quantitative and qualitative responses with the use of a CATI (Computer Assisted Telephone Interview) system; performing response range and logic checks on quantitative variables in order to check for miscoded variables, and cleaning the final data file.

Data analysis was performed with SPSS and involved the use of appropriate descriptive statistical techniques (frequencies, percentages, means) and explanatory statistical techniques (Kendall’s Tau c, Cramers V, and t-tests). Throughout this report, relationships between variables that are statistically significant at the .05 level or better, and which are meaningful to an understanding of the project objectives are reported (accompanied in footnotes by the statistical test of significance, the respective coefficient, and the significance level).<sup>3</sup> Attachment B contains tables of each survey question crosstabbed by year of survey.

#### V. Sample Characteristics

The information in this section of the report provides an overview of the respondents for the 2005 survey. There were no statistically significant differences in the 2000 and 2005 sample characteristics.

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<sup>2</sup> The response rate was computed with the following formula: completed interviews + partial or suspended interviews divided by completed interviews + partial or suspended interviews + qualified refusals + breakoffs + no answer + busy signals + answering machine + soft refusals + hard refusals + scheduled callbacks + unspecified callbacks.

<sup>3</sup> *Cramer’s V* is a measure of the relationship between two variables and is appropriate to use when one or both of the variables are at the nominal level of measurement. *Cramer’s V* ranges from 0 to +1 and indicates the strength of a relationship. The closer to +1, the stronger the relationship between the two variables. The *Kendall’s tau c* statistic is a measure of the relationship between two variables and is appropriate to use with ordinal level variables or with dichotomous nominal level variables. *Tau c* ranges from -1 to +1 and indicates the strength and direction (inverse or direct) of a relationship. The closer to either +1 or -1, the stronger the relationship between the two variables. The accompanying “p” scores presented in this report for *Cramer’s V* and *Kendall’s tau c* indicate the level of statistical significance. Independent-samples T -Test procedure compares means for two groups of cases, in this case was used to compare many of the 2005 and 2000 surveys.

### **A. Demographic Characteristics**

1. Gender (n=802):
  - Female (47.5%)
  - Male (52.5%)
2. Age (n=802):
  - Under 25 (5.2%)
  - 25 to 34 (14.2%)
  - 35 to 44 (19.6%)
  - 45 to 54 (25.9%)
  - 55 to 64 (20.4%)
  - 65 to 74 (9.0%)
  - 75 and older (3.4%)
  - Refused (2.2%)
3. Type of residence area (n=802):
  - Metropolitan area (29.6%)
  - Suburban (27.9%)
  - Small town or rural (42.5%)
4. Years lived in WA (n=802):
  - Less than 6 months (1.9%)
  - 6 months to 11 months (1.0%)
  - 1 to 4 years (4.4%)
  - 5 to 9 years (6.5%)
  - 10 or more years (86.3%)
5. Primary language spoken (n=802)
  - English (97.3%)
  - Other [Chinese, Russian, Spanish, Other] (2.5%)
  - Don't know (0.2%)

### **B. Travel Behavior**

1. Approximate days per week traveled on state highways (n=802):
  - 1 day (3.0%)
  - 2 days (6.1%)
  - 3 days (8.9%)
  - 4 days (9.6%)
  - 5 days (25.9%)
  - 6 days (14.6 %)
  - 7 days (31.9%)
  - Three (24.7%)
  - Four (11.8%)
  - Five (3.0%)
  - Six (2.0%)
  - 7 or more (1.1%)
  - Did not respond (.5%)
2. Number of working vehicles in household (n=802):
  - One (16.8%)
  - Two (40.5%)
3. Miles traveled on state highways per week (n=802):
  - 50-100 miles (38.0%)
  - 101-150 miles (13.2%)
  - 151-200 miles (11.5%)
  - 201-250 miles (8.6%)
  - 251 or more miles (28.7%)

## **VI. Results<sup>4</sup>**

Because differences between the three regions of the state were generally not statistically significant and because a major focus of this report is to look at trends since the 2000 survey charts and tables are presented with results broken out by the year of the survey and not by

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<sup>4</sup> Because the sample was a disproportionate stratified random sample (stratified disproportionately among three sections of Washington State) and because only individuals who drive 50 miles or more a week on state highways were interviewed, these sample characteristics are not necessarily representative of all of Washington State.



areas of the state (as was done in the 2000 report). Where statistically significant differences were found among the areas of the state, those results are discussed within the body of the report.

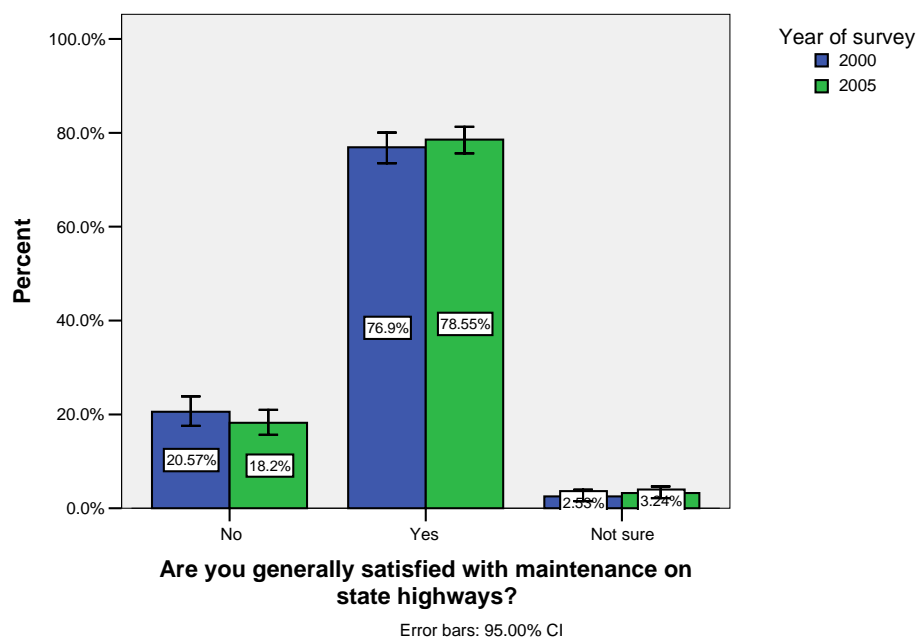
## A. Satisfaction with Level of Maintenance

### 1. Most Drivers are Satisfied with Highway Maintenance

Respondents were asked if they were generally satisfied with the level of maintenance on state highways. Chart 1<sup>5</sup> indicates that more than three-quarters (79%) are generally satisfied with highway maintenance. Less than one-fifth (18%) of the respondents reported they were not satisfied.

Those who are more satisfied are slightly more likely to travel more miles per week on state highways<sup>6</sup> and to be from either the eastern or western non-urban areas of the state<sup>7</sup>.

**Chart 1 - General Satisfaction with Highway Maintenance**



<sup>5</sup> The confidence bars that appear at the top of the bars in all charts in this report let you know if there is a significant difference across categories. When comparing the confidence bars from the 2000 and 2005 bars in these charts, those which do not overlap indicate a significant difference. These significant differences are further supported by the t-test results reported throughout the report.

<sup>6</sup> Tau-c = -.123, p = .000

<sup>7</sup> Cramer's V = .101, p = .018)

## 2. Roadway Surfaces Still the Number 1 Improvement Desired

Of those respondents who indicated that they were not generally satisfied with the level of maintenance or reported that were not sure, 69% said that the maintenance of roadway surfaces needed to be improved (almost identical to the 71% from 2000). Of much less concern are signs, signals, lane striping, lighting, and pavement reflectors (17%, up from 12% in 2000). Fifteen percent (similar to the 14% in 2000) indicated that the amount of litter, debris and overgrown vegetation is an area that needs to be improved.

**Table 1: Improvements desired in maintenance services**

	Year of survey	
	2000 %	2005 %
Roadway surface - potholes, cracks, rough road	71.23	69.19
Signs, signals, lane striping, lighting, pavement reflectors	12.33	17.44
Litter, debris, overgrown vegetation	14.38	15.12
Snow / ice removal not done effectively	4.11	6.98
Rest areas not well-maintained	2.05	2.33
Poor drainage	2.74	2.33
Shoulders are dangerous	3.42	
More/bigger lanes/roads		6.98
General maintenance/have more/better maintenance		4.65
Construction takes too long		5.81
Congestion/traffic/traffic flow		7.56
Other	19.86	12.21

\*Percentages do not add up to 100% because respondents could give more than one response.

### B. Gap Analysis (Evaluating what's Important and How Satisfied Drivers Are)

A gap analysis was performed by determining how satisfied respondents were with WSDOT maintenance activities, and how important the respondents reported those activities to be to them. Each item in this section of the survey was rated on a scale of 1 to 4, with 1 being either "very dissatisfied" or "very unimportant" and 4 being "very satisfied" or "very important". By subtracting the mean satisfaction score from the mean importance score, either a positive or negative gap score is created (unless the two means are equal).

- A positive gap indicates that the WSDOT maintenance activity in question exceeds the respondents' expectations
- A negative gap indicates that the WSDOT maintenance activity does not live up to the respondents expectations

This gap analysis can be helpful in assigning priorities, especially considering how the question was posed to the respondents: "if I had \$200 worth of work to do but only \$100

to spend, which work activities would I spend the money on and which would not get accomplished?" The maintenance activities with the highest *negative* gap scores would be the activities viewed as top priorities by the respondents.

Charts 2-5 present the satisfaction ratings, the importance ratings and the gap analysis for the entire state and for each area of the state. Differences between the areas were generally not statistically significant, except as noted below:

- Those in eastern Washington rated *snow and ice removal* more important than the other regions<sup>8</sup>
- Those in eastern Washington and western non-urban Washington rated *maintaining rest areas* more important<sup>9</sup>

There were also differences in satisfaction with *how well highway lighting works*, with those in suburban areas being slightly more satisfied than those in the urban or rural areas.<sup>10</sup> Females were significantly more likely to rate all of the maintenance activities as slightly more important than males. Significant trends since 2000 are as follows:

- Satisfaction with maintaining roadway surfaces increased<sup>11</sup>
- Satisfaction with maintaining rest areas decreased<sup>12</sup>
- The importance of maintaining roadway surfaces has decreased<sup>13</sup>
- The importance of maintaining drainage has decreased<sup>14</sup>
- The importance of roadside vegetation has increased<sup>15</sup>
- The importance of maintaining traffic signals has decreased<sup>16</sup>
- The importance of maintaining rest areas has decreased<sup>17</sup>

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<sup>8</sup> Cramer's V = .133, p = .000

<sup>9</sup> Cramer's V = .134, p = .000

<sup>10</sup> Cramer's V = .110, p = .004

<sup>11</sup> T = -3.399, p = .001

<sup>12</sup> T = 3.682, p = .000

<sup>13</sup> T = 4.665, p = .000

<sup>14</sup> T = 4.124, p = .000

<sup>15</sup> T = -3.863, p = .000

<sup>16</sup> T = 1.983, p = .048

<sup>17</sup> T = 4.020, p = .000

Chart 2: State-wide Gap Analysis (n=802)

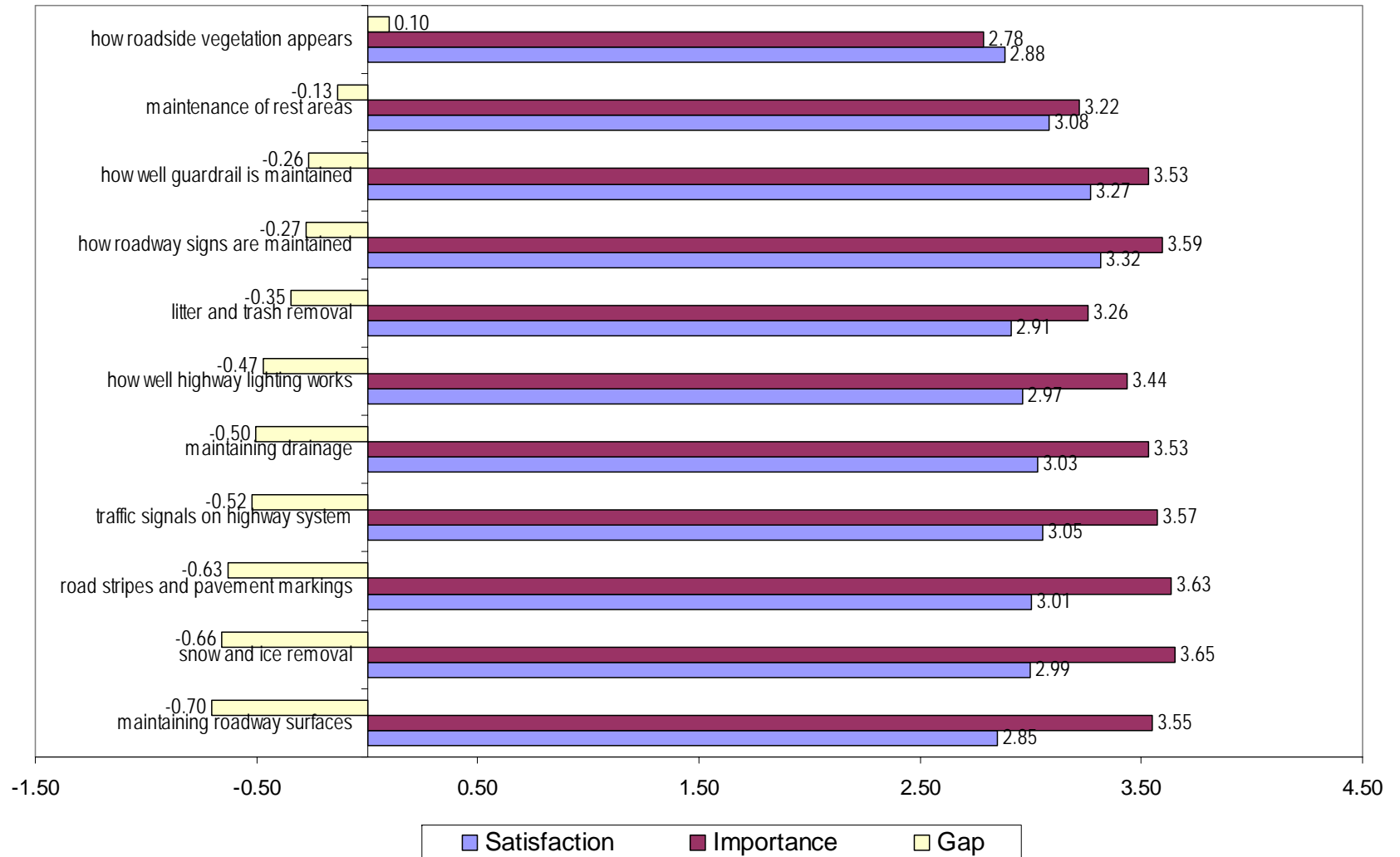


Chart 3: Western Non-urban Washington (n=268)

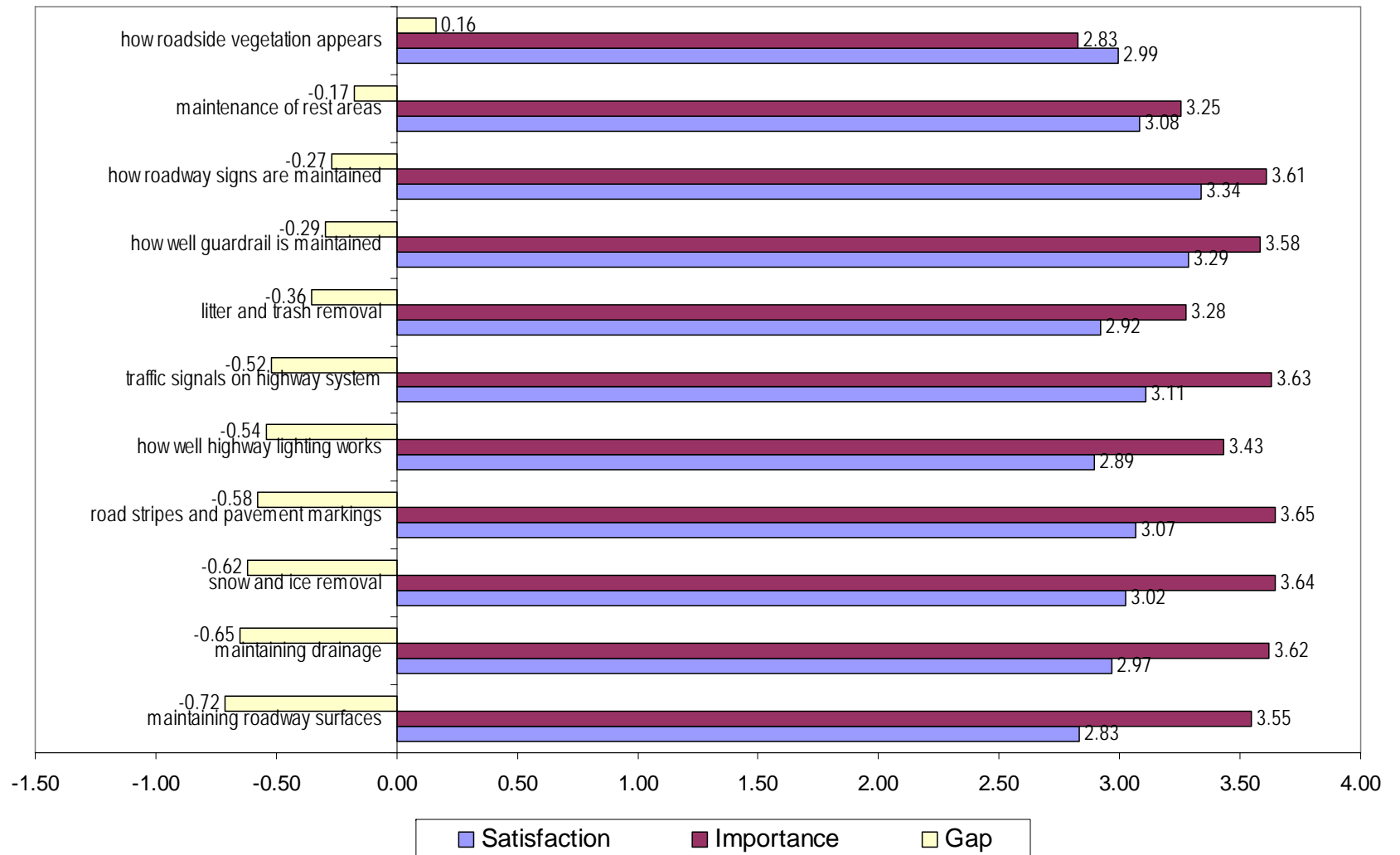


Chart 4: Western Urban Washington (n=267)

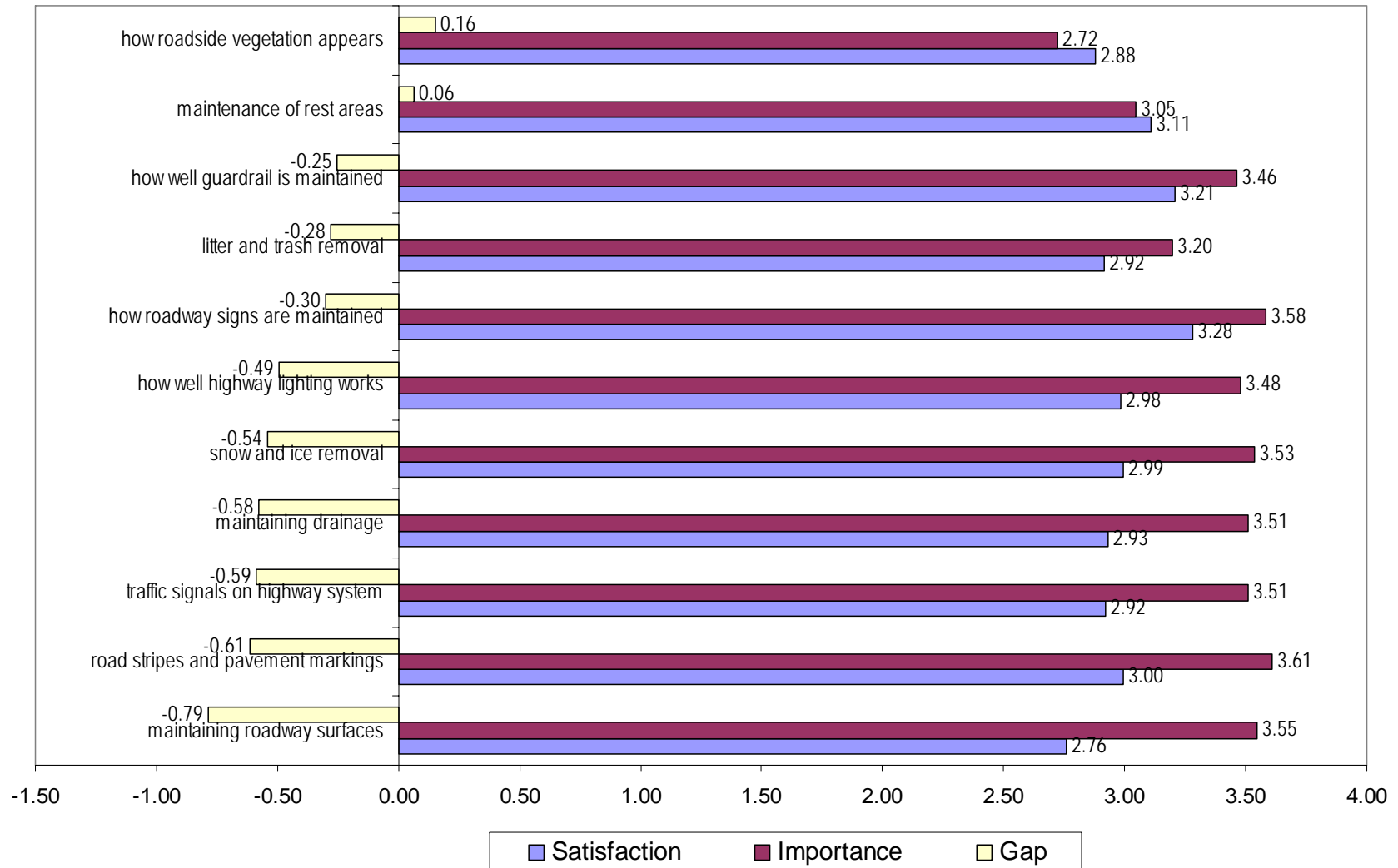
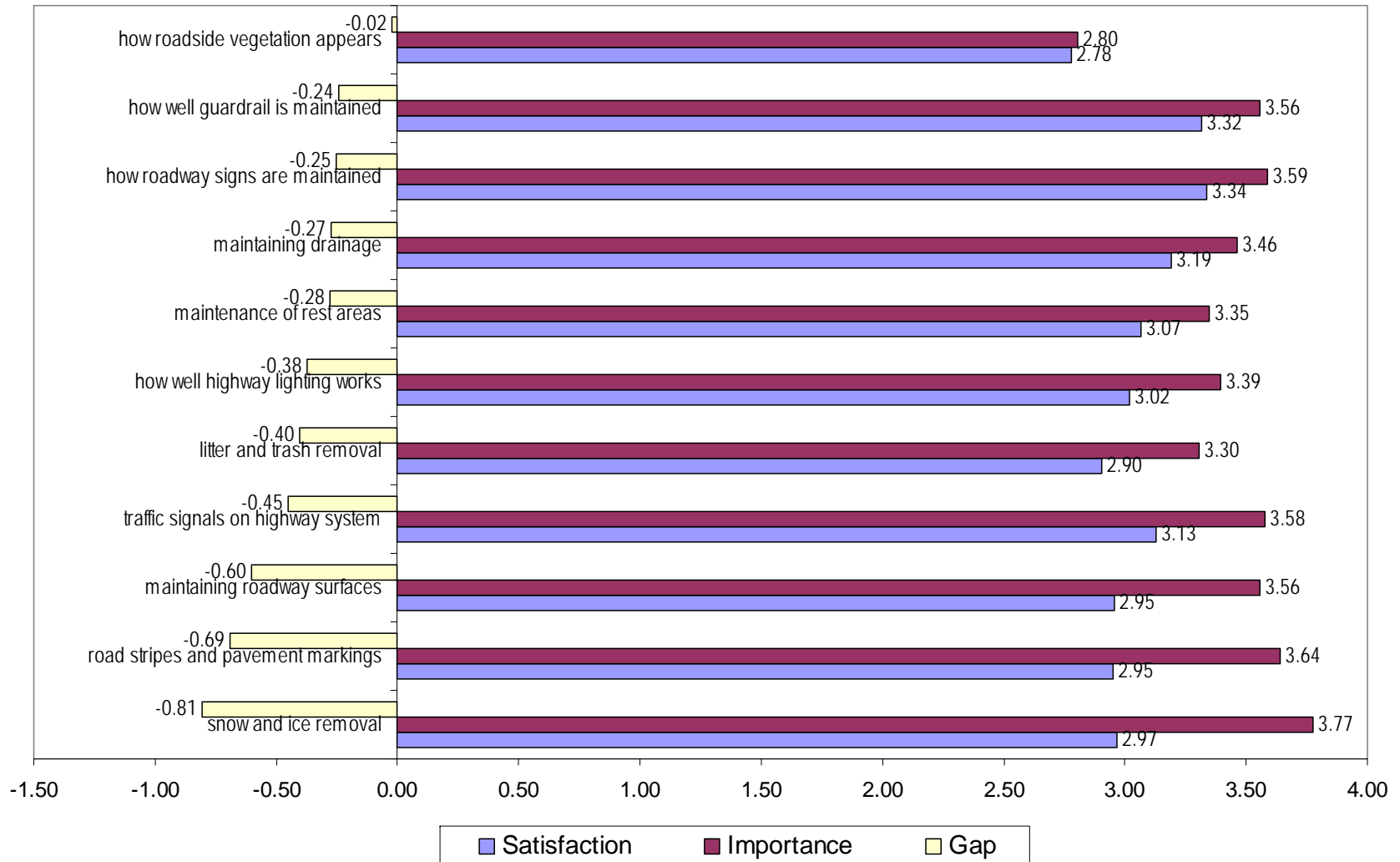


Chart 5 - Eastern Washington Gap Analysis (n=267)



## 1. Positive Gap Scores

Charts 2-5 show the one area where WSDOT is exceeding the respondents' expectations (with the exception of in eastern Washington) is the maintenance of roadside vegetation (how plants, grasses, flowers by the roadside appear). Although there is a positive gap, the average importance scores for this activity are not very high relative to other maintenance activities. This indicates that although there is a moderate level of satisfaction with maintaining roadside vegetation, it is not a very important activity to the respondents.

## 2. Negative Gap Scores

- The largest negative gap scores for the state as a whole (and particularly for those in western urban and western non-urban Washington) was the condition of roadway surfaces. This was also the case in 2000.
- Also consistent with the 2000 survey are the following other maintenance activities with large gap scores:
  - Snow and ice removal (in eastern Washington and western non-urban Washington)
  - Road stripes and pavement markings (in eastern Washington and western urban Washington)
  - Maintaining drainage (in western urban and non-urban Washington)

### C. Roadside Litter, Lighting, and Road Surfaces Identified as Areas Needing Improvement

Respondents were asked what needed to be improved about the two maintenance activities that they had given the lowest satisfaction ratings to. In 2005 we coded all of these open-ended responses into the categories in Table 2 (whereas in 2000 we simply summarized the themes from the open ended responses). As can be seen in Table 2, the following issues emerged as desired maintenance improvements :

- Have better, more regular cleaning of roadside litter (19.83%)
- Improve lighting (13.84%)
- Road surfaces have grooves, ridges, ruts, and potholes (10.6%)
- Better, more consistent , more frequent maintenance (10.47%)

<b>Table 2: Other Improvements Needed</b>	<b>2005%</b>
Nothing	22.57
Have better/more regular cleaning/litter	19.83
Other miscellaneous mentions	19.08
Too dark/not enough light/there are no/not enough lights	13.84
Don't Know	10.85
Road surfaces have grooves/ridges/improve/fix ruts/potholes	10.6
Have better/more consistent/frequent maintenance	10.47
Need to maintain/clean up/have better visibility of striping	9.85
Other snow/ice removal mentions	8.35



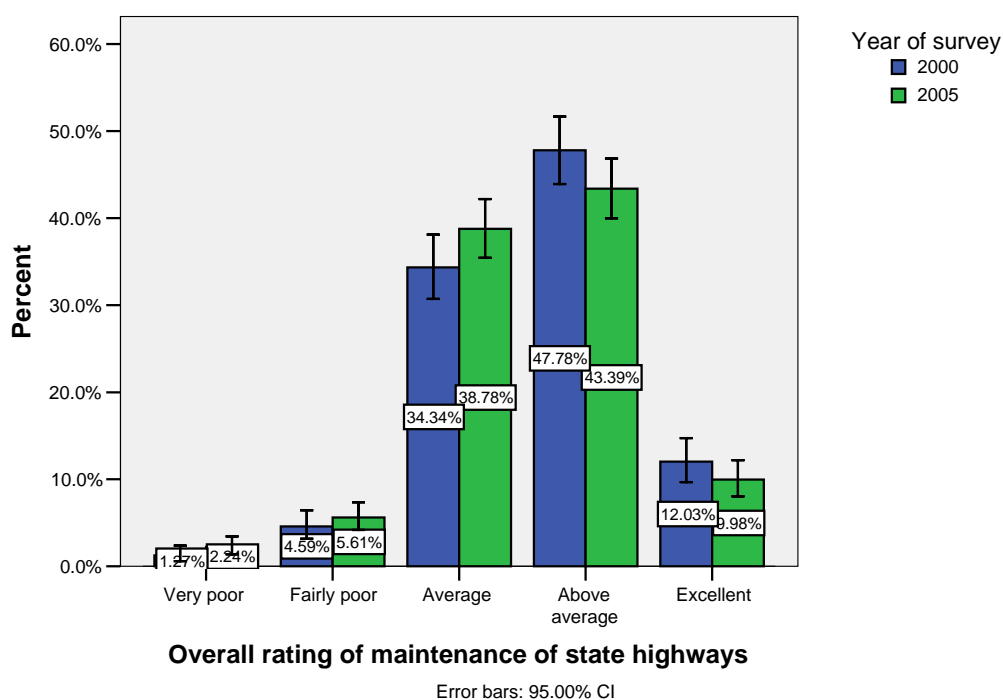
Solve problem of flooding/puddles/standing water	7.61
Other miscellaneous signs/signals/lighting mentions	7.23
Other signs mentions	6.98
Improve/cut down on response time/have prompt response	6.11
Need red lights/traffic lights to be timed/synchronized	5.86
Improve drainage/need better drainage	5.86
Maintain greenery/vegetation	5.74
Other rest areas mentions	5.11
Other roadway surface mentions	4.86
Add greenery/vegetation	4.49
Improve bathroom facilities/have cleaner bathrooms	4.49
Improve weed control/cut weeds on roadside	4.36
Need to paint/need to repaint more frequently	3.99
Other greenery/vegetation mentions	3.74
Improve snow removal/plowing/have quicker snow removal	3.62
Other sanitation mentions	3.62
Improve visibility	3.24
Solve problem of hydroplaning	3.24
Enforce/have stiffer fines/penalties on littering	3.24
Expand road/add more lanes	2.99
Improve/fix guardrail/put guardrails/barriers where needed	2.99
Road surfaces are rough/make the road smoother	2.87
Repave road surfaces	2.87
Have public education about littering/change public's attitude	2.74
Other reflector mentions	2.62
Create jobs/hire people/increase use of volunteers	2.62
Other miscellaneous roadway/roadside beautification mentions	2.49
Improve/fix the cracks	2.37
Other Lighting Mentions	2.37
Road surfaces are bumpy/improve/fix the bumps	2.24
Use inmates/prisoners to help with maintenance	2.12
Improve/fix road surfaces/have higher quality road surfaces	1.87
Have better lights/lighting	1.87
Other fines/penalties/regulations mentions	1.5
Road surfaces are uneven/even out the road	1.37
Improve appearance/make it look better	1.25
Have more illuminated signs	1.12
Ban/enforce regulations on studded tires	1.12
Other water/flooding/drainage mentions	0.87
Have better signs	0.37

## D. Overall Maintenance and Response to Emergencies

### 1. Most Rate Maintenance Above Average or Better

This question asked respondents to rate highway maintenance “in light of all the topics” that were discussed in the gap analysis questions. Ten percent reported overall maintenance as being “excellent” compared to 43% reporting maintenance activities to be *above average*. Less than 8 percent rated overall maintenance as *fairly poor* or *very poor*. Since 2000, the rating of overall maintenance has decreased.<sup>18</sup>

**Chart 6 - Overall Rating of Highway Maintenance**

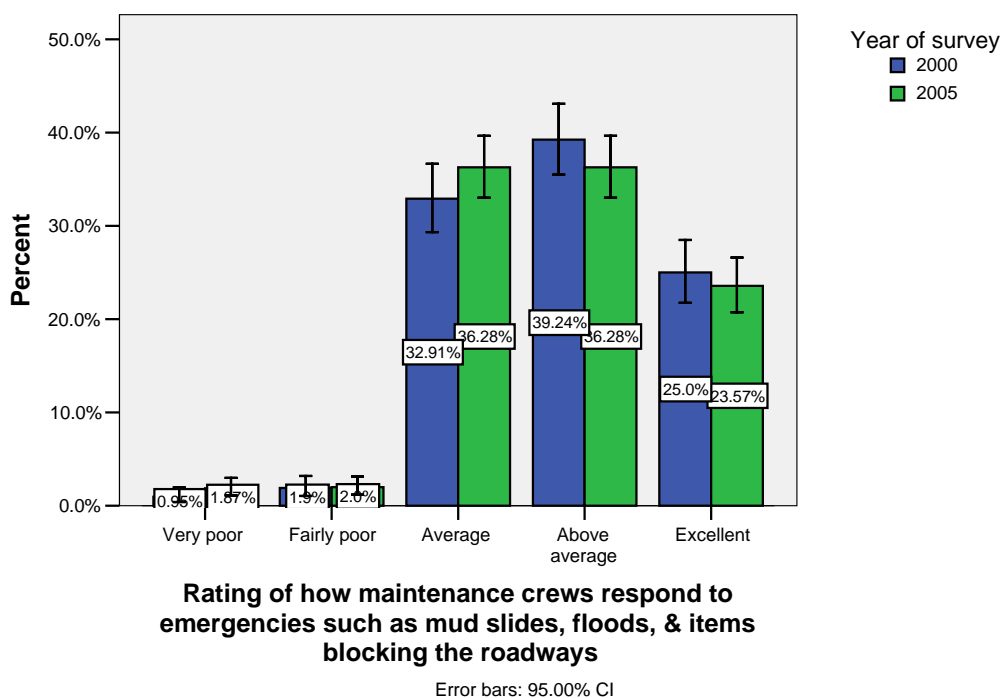


<sup>18</sup> T = 2.648, p = .008

## 2. Response to Emergencies Highly Rated

This question asked respondents to rate the way State maintenance crews responded to emergencies (such as mud slides, floods, and items blocking the roadway). Almost a quarter (24%), reported emergency response to be *excellent*, while 36 percent reported it was *above average*. Less than 4 percent rated emergency response to be *fairly poor* or *very poor*.

**Chart 7 - Rating of Maintenance Crews Handling Emergencies**

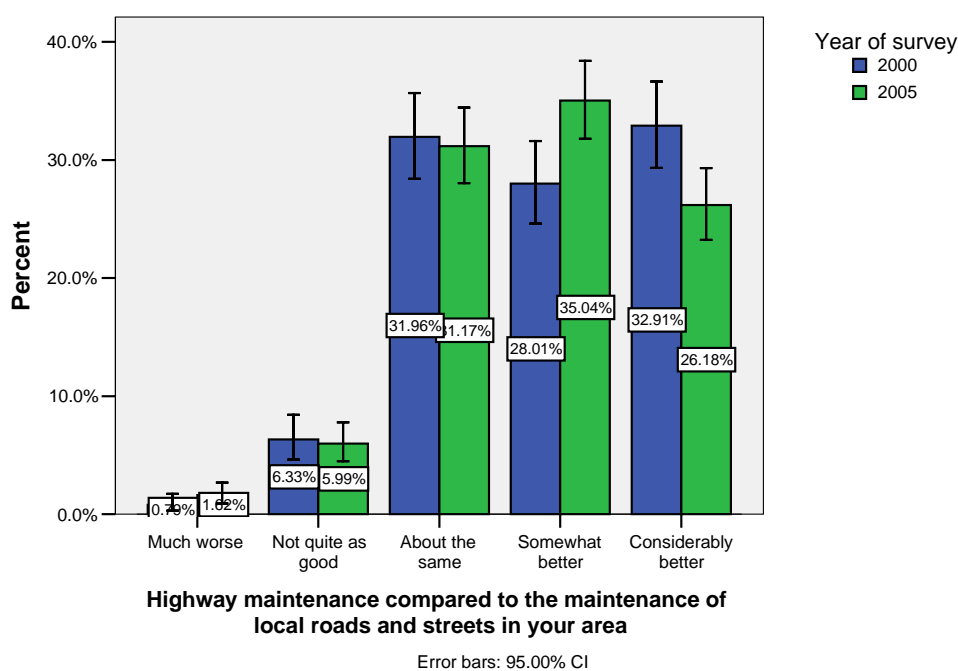


## E. State Highways Compared to Local Roads and Other State Highways

### 1. Majority Rates State Highways Better Maintained than Local Roads

Statewide, more than half of respondents thought state highways were better maintained than local roads, with more than a quarter (26%) rating them *considerably better*, especially among those in eastern Washington.<sup>19</sup> Less than 8 percent rated state highway maintenance either *not quite as good* or *much worse*.

**Chart 8 - Maintenance of Highways Compared to Local Roads**



<sup>19</sup> Cramer's V = .128, p = .001

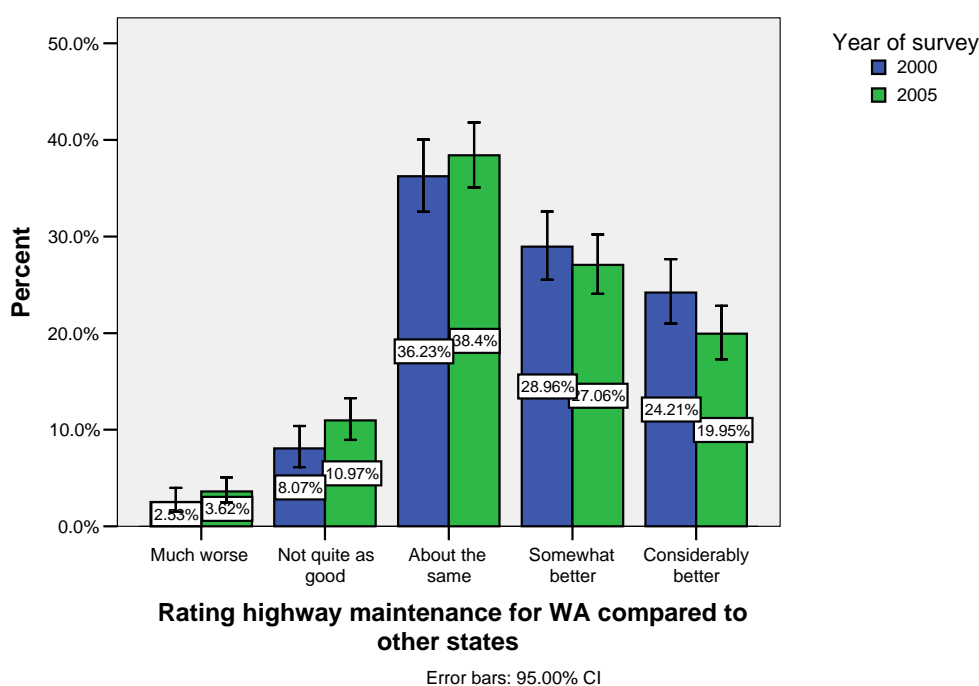
## 2. Maintenance of WA State Highways Rated Better than Other States by Almost Half

Almost half (47%) of respondents statewide thought that state highways in Washington were better than other states' highways, with a fifth (20%) rating them *considerably better*. However, almost 15 percent rated maintenance of Washington state highways *not quite as good* or *much worse*. Since 2000, ratings of Washington state highways have decreased.<sup>20</sup>

Females rated Washington state highways slightly better than males<sup>21</sup>, as did those in the suburban areas of the state<sup>22</sup>.

Those in western non-urban Washington rated maintenance of Washington state highways slightly better, while those in western urban Washington were slightly more likely to rate them worse.<sup>23</sup>

**Chart 9 - Maintenance of WA Highways Compared to Other States**



<sup>20</sup> T = 2.836, p = .005

<sup>21</sup> Cramer's V = .129, p = .010

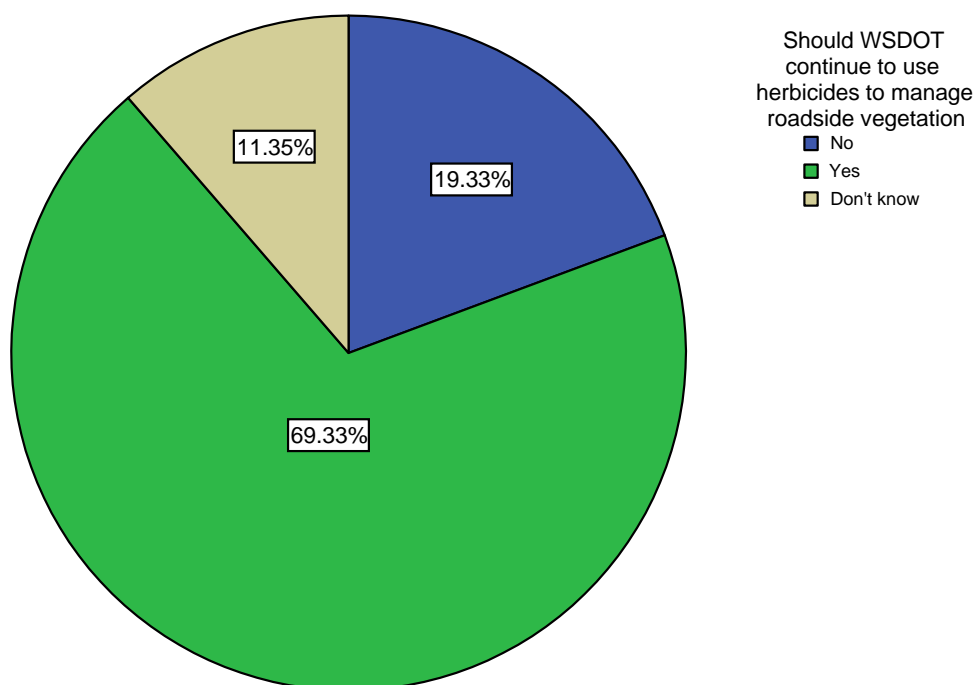
<sup>22</sup> Cramer's V = .101, p = .039

<sup>23</sup> Cramer's V = .126, p = .001

## F. Herbicide Use Approved by More than Two-Thirds

When asked if WSDOT should continue to use herbicides to manage roadside vegetation, more than two-thirds (69%) approved. Less than a fifth (19%) did not approve. Those in the eastern region of the state are slightly more likely to approve of the use of herbicides than those from other parts of the state.<sup>24</sup>

Chart 10 - Should WSDOT Continue to Use Herbicides



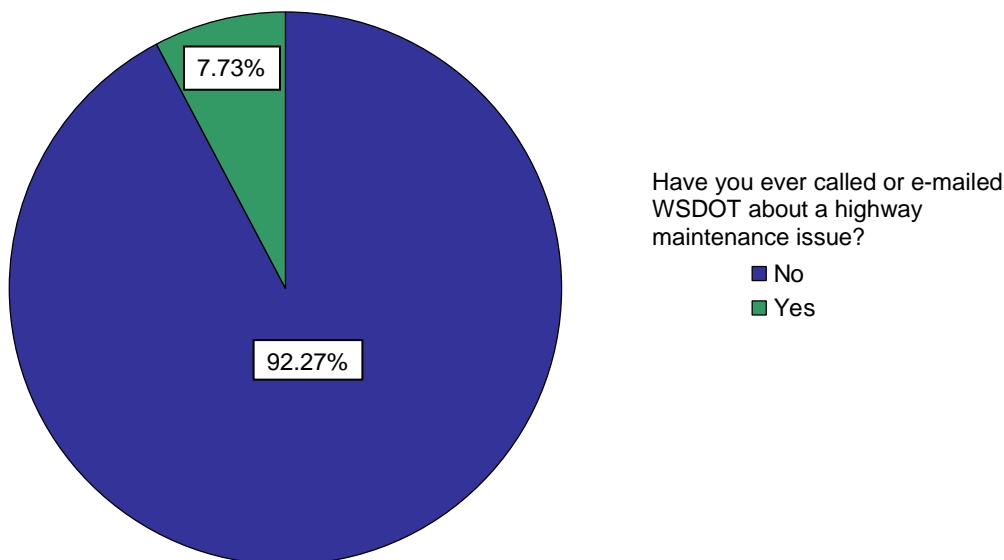
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<sup>24</sup> Cramer's V = .143, p = .001

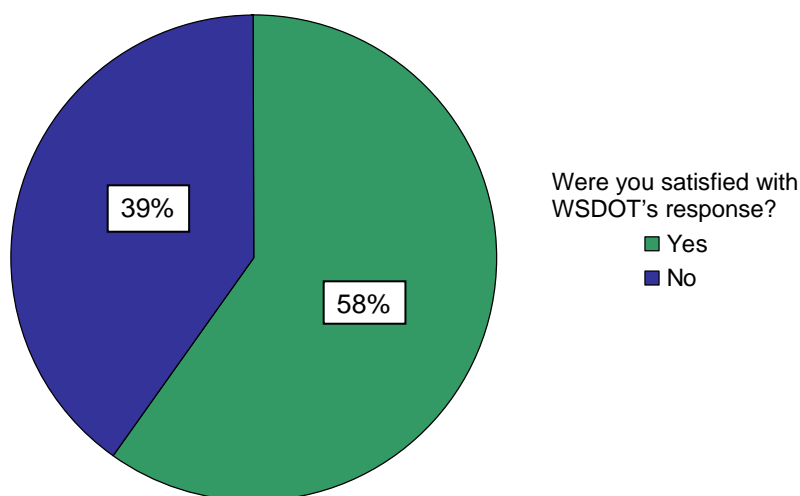
### G. Most Have Not Contacted WSDOT About Maintenance Issues

Only 8 percent have ever contacted WSDOT (either by telephone or e-mail) about highway maintenance issues. Of those who have contacted WSDOT, more than half (58%) reported being satisfied with WSDOT's response, especially females.<sup>25</sup> However, well more than a third (39%) of those who contacted WSDOT were not satisfied.

**Chart 11 - Ever Contacted WSDOT About Maintenance Issues?**



**Chart 12 - When You Contacted WSDOT, Were You Satisfied with WSDOT's Response?**



<sup>25</sup> Cramer's V = .319, p = .013

## Attachment A – Survey

### WSDOT MAINTNENACE CUSTOMER SURVEY QUESTIONNAIRE -2005

Hello, I'm calling for the Washington State Department of Transportation to learn more about public perceptions and attitudes concerning highways in the State of Washington. Do you travel at least 50 miles a week in a motor vehicle on a State Highway? (IF NOT, ASK IF YOU MAY TALK WITH SOMEONE ELSE IN THE HOUSE WHO DOES)

We are talking with Washington citizens about the condition of highways that are maintained by the State. These State highways include U.S., Interstate, and State Routes, but not the arterials and streets maintained by cities and counties.

1. Highway maintenance involves activities such as patching potholes, maintaining signs and signals, doing snow and ice removal, and picking up litter. Thinking about the State highways you have recently traveled on, are you generally satisfied with the level of maintenance of these highways?

- A. Yes                      SKIP TO QUESTION 2
- B. No
- C. Not sure

- 1b. What would you like to see improved? (DON'T READ LIST; PROBE)

- 
- A. Roadway surface - potholes, cracks, rough road
  - B. Signs, signals, lane striping, lighting, reflectors in poor condition
  - C. Snow/ice removal not done effectively
  - D. Rest areas not well-maintained
  - E. Poor drainage
  - F. Litter, debris, overgrown vegetation
  - G. Other (please specify\_\_\_\_\_)

2. I am going to read through a list of categories concerning the level of maintenance of highways in the State. For each category, I would like you to rate your current level of satisfaction or dissatisfaction on a scale of one to four. One would mean that you are extremely dissatisfied, two means that you are dissatisfied, three means that you are satisfied, and four means that you are extremely satisfied.

After you rate your current level of satisfaction for each maintenance category, I'm going to then ask you to rate the importance of each category. For each category, I would like you to rate how important the category is to you on a scale of one to four. One would mean that it is extremely unimportant, two means that it is unimportant, three means that it is important, and four means that it is extremely important. The relative importance of



different maintenance categories is useful when making decisions on utilizing limited funds. As you consider the importance rating, you may want to think of it in terms of "if I had \$200 worth of work to do but only \$100 to spend, which work activities would I spend the money on and which would not get accomplished"

- A. First, how about the roadway surfaces, in general, where maintenance efforts focus on patching potholes, sealing cracks in the pavement, and repairing other minor flaws in the pavement surface. On the scale from one to four, how satisfied are you with the maintenance level of roadway surfaces on the state highway?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining roadway surfaces?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

- B. What is your level of satisfaction with how well drainage is handled on the highways?  
This relates to how well stormwater drains from the highway surface so that no puddles form.

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining drainage features?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

- D. What is your level of satisfaction with the level of litter and trash removal from the roadside?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of removing litter from the roadside?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

- E. What is your level of satisfaction with how the plants, grasses, and flowers by the roadside appear?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining roadside vegetation?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

- F. How about your level of satisfaction with snow and ice removal?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of snow and ice removal activities?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

G. How would you rate your level of satisfaction with road stripes and pavement markings?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining road stripes and pavement markings?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

H. What is your level of satisfaction with how roadway signs are maintained?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining roadway signs?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

I. How about your level of satisfaction with how well guardrail is maintained?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining guardrail?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

J. Next, how satisfied are you with the traffic signals on the highway system?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining traffic signals?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

K. How would you rate your level of satisfaction with how well highway lighting works?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining highway lighting?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

L. How satisfied are you with the maintenance of rest areas.?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

And the importance of maintaining rest areas?

1      2      3      4                      5 (DON'T KNOW/NOT SURE - DO NOT READ)

(LOOKING AT THE LIST OF THIRTEEN ITEMS, NOTE THE TWO WHICH HAVE THE LOWEST RATINGS. IF MORE THAN TWO, SELECT THE FIRST TWO LOWEST. THEN ROTATE EACH TIME THIS OCCURS. IF EVERYTHING IS RATED A ONE, **SKIP TO QUESTION 5.**

3a. I notice you gave \_\_\_\_\_ one of the lower satisfaction ratings (MARK FROM ABOVE)

- a. roadway surfaces
- b. drainage facilities
- c. litter
- d. roadside vegetation
- e. snow and ice removal
- f. road stripes and pavement marking
- g. roadway signs
- h. guardrail
- i. traffic signals
- j. highway lighting
- k. rest areas

3b. What needs to be improved?

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4a. And how about \_\_\_\_\_ (MARK FROM ABOVE)

- a. roadway surfaces

- b. drainage facilities
- c. litter
  
- d. roadside vegetation
- e. snow and ice removal
- f. road stripes and pavement marking
- g. roadway signs
- h. guardrail
- i. traffic signals
- j. highway lighting
- k. rest areas

4b. What needs to be improved?

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5. Thinking about all of the different State highway maintenance activities we've talked about, overall would you rate maintenance of the Washington highways as: (READ)

---

- A. Excellent
- B. Above average
- C. Average
- D. Fairly poor or
- E. Very poor

6. How would you rate the way State highway maintenance crews respond to emergencies such as mud slides, floods, and items blocking the roadways? Would you say they are usually: (READ LIST)

---

- A. Excellent
- B. Above average
- C. Average
- D. Fairly poor or
- E. Very poor

7. Compared to the maintenance of local roads and streets in your area, would you say the maintenance of State highways is... (READ)

---

- A. Considerably better
- B. Somewhat better

- C. About the same
- D. Not quite as good
- E. Much worse

8. And how would you rate the level of maintenance for Washington State highways in comparison to highways in other states? Would you say they are: (READ)

- 
- A. Considerably better
  - B. Somewhat better
  - C. About the same
  - D. Not quite as good
  - E. Much worse

9. The Department of Transportation uses a variety of methods, including herbicides, to manage roadside vegetation. Should the department continue using herbicides for vegetation control? YES  
NO DON'T KNOW

10. Have you ever called or e-mailed the Washington State Department of Transportation about a highway maintenance issues?

YES NO (if no, skip to question 12)

11. If YES, were you satisfied with the response?

YES NO DON'T KNOW

Now, I would like to ask just a few more questions for comparative purposes only. These answers will in no way be identified with your name.

12. Approximately how many miles do you travel on state highways per week? (DO NOT READ)

- A. 50-100 miles
- B. 101-150 miles
- C. 151-200 miles
- D. 201- 250 miles
- E. 251 or more miles

13. Approximately how many days per week do you use state highways? (DO NOT READ)

- A. 1 day
- B. 2 days
- C. 3 days
- D. 4 days
- E. 5 days
- F. 6 days
- G. 7days

14. How long have you been a resident of Washington State (DO NOT READ)

- A. Less than 6 months
- B. 6 months to 11 months
- C. 1 to 4 years
- D. 5 to 9 years
- E. 10 or more years

15. Do you live in a metropolitan area (SUCH AS SEATTLE, TACOMA, EVERETT, OLYMPIA, BELLEVUE, SPOKANE), a medium-sized suburban area (SUCH AS PORT ANGELES, YAKIMA, OR ELLENSBURG), or a small town or rural area?

- A. Metropolitan area
- B. Suburban
- C. Small town or rural

16. What is your home zip code?

17. How many working motor vehicles are in your household?

18. Is English the primary language spoken in this household?

- ☐ Yes (skip to 20)
- ☐ No (continue onto 19)
- ☐ Don't know (skip to Q 20)

19. What is the primary language spoken? \_\_\_\_\_

20. And finally, what is your age? (IF PERSON HESITATES, READ THE RANGES)

- A. Under 25
- B. 25-34
- C. 35-44
- D. 45-54
- E. 55-64
- F. 65-74
- G. 75 and older
- H. Refused

THANK YOU VERY MUCH FOR TAKING THE TIME TO RESPOND TO THIS SURVEY

(TO BE COMPLETED AFTER THE INTERVIEW)

21. Gender of respondent                      1. Male                      2. Female

22. RECORD COUNTY FROM SAMPLING LIST

## Attachment B: Survey Questions Crosstabbed by Survey Year

**Q1a - Are you generally satisfied with maintenance on state highways? \* Year of survey  
Crosstabulation**

			Year of survey		Total
			2000	2005	
Are you generally satisfied with maintenance on state highways?	No	Count	130	146	276
		% within Year of survey	20.6%	18.2%	19.2%
	Yes	Count	486	630	1116
		% within Year of survey	76.9%	78.6%	77.8%
	Not sure	Count	16	26	42
		% within Year of survey	2.5%	3.2%	2.9%
Total		Count	632	802	1434
		% within Year of survey	100.0%	100.0%	100.0%

**Q1b - Improvements desired in maintenance services**

			Year of survey	
			2000	2005
Improvements needed	Roadway surface - potholes, cracks, rough road	Count	104	119
		Column %	71.2	69.2
	Signs, signals, lane striping, lighting, pavement reflectors	Count	18	30
		Column %	12.3	17.4
	Snow / ice removal not done effectively	Count	6	12
		Column %	4.1	7.0
	Rest areas not well-maintained	Count	3	4
		Column %	2.1	2.3
	Poor drainage	Count	4	4
		Column %	2.7	2.3
	Litter, debris, overgrown vegetation	Count	21	26
		Column %	14.4	15.1
	Shoulders are dangerous	Count	5	
		Column %	3.4	
	More/bigger lanes/roads	Count		12
		Column %		7.0
	General maintenance/have more/better maintenance	Count		8
		Column %		4.7
	Construction takes too long	Count		10
		Column %		5.8
	Congestion/traffic/traffic flow	Count		13
		Column %		7.6
	Other	Count	29	21
		Column %	19.9	12.2

## Q2a - Satisfaction with maintenance categories

				Extremely dissatisfied	Dissatisfied	Satisfied	Extremely satisfied	Don't know / not sure	Total
Year of survey	2000	Satisfaction with maintaining roadway surfaces	Count	60	158	318	94	2	632
			%	9.5%	25.0%	50.3%	14.9%	.3%	100.0%
		Satisfaction with maintaining drainage	Count	28	112	338	141	13	632
			%	4.4%	17.7%	53.5%	22.3%	2.1%	100.0%
		Satisfaction with litter and trash removal	Count	27	135	311	155	4	632
			%	4.3%	21.4%	49.2%	24.5%	.6%	100.0%
		Satisfaction with how plants, grasses, and flowers by roadside	Count	23	142	314	123	30	632
			%	3.6%	22.5%	49.7%	19.5%	4.7%	100.0%
		Satisfaction with snow and ice removal	Count	29	116	305	142	40	632
			%	4.6%	18.4%	48.3%	22.5%	6.3%	100.0%
		Satisfaction with road stripes and pavement markings	Count	28	133	298	170	3	632
			%	4.4%	21.0%	47.2%	26.9%	.5%	100.0%
		Satisfaction with how roadway signs are maintained	Count	11	39	320	261	1	632
			%	1.7%	6.2%	50.6%	41.3%	.2%	100.0%
		Satisfaction with how well guardrail is maintained	Count	5	54	333	225	15	632
			%	.8%	8.5%	52.7%	35.6%	2.4%	100.0%
		Satisfaction with the traffic signals on highway system	Count	21	92	341	152	26	632
			%	3.3%	14.6%	54.0%	24.1%	4.1%	100.0%
		Satisfaction with how well highway lighting works	Count	12	113	349	138	20	632
			%	1.9%	17.9%	55.2%	21.8%	3.2%	100.0%
		Satisfaction with the maintenance of rest areas	Count	10	61	264	211	86	632
			%	1.6%	9.7%	41.8%	33.4%	13.6%	100.0%
	2005	Satisfaction with maintaining roadway surfaces	Count	38	152	498	108	6	802
			%	4.7%	19.0%	62.1%	13.5%	.7%	100.0%
		Satisfaction with maintaining drainage	Count	26	130	424	205	17	802
			%	3.2%	16.2%	52.9%	25.6%	2.1%	100.0%
		Satisfaction with litter and trash removal	Count	51	155	404	188	4	802
			%	6.4%	19.3%	50.4%	23.4%	.5%	100.0%
		Satisfaction with how plants, grasses, and flowers by roadside	Count	37	181	398	164	22	802
			%	4.6%	22.6%	49.6%	20.4%	2.7%	100.0%
		Satisfaction with snow and ice removal	Count	33	132	381	194	62	802
			%	4.1%	16.5%	47.5%	24.2%	7.7%	100.0%
		Satisfaction with road stripes and pavement markings	Count	24	154	416	206	2	802
			%	3.0%	19.2%	51.9%	25.7%	.2%	100.0%
		Satisfaction with how roadway signs are maintained	Count	12	55	399	334	2	802
			%	1.5%	6.9%	49.8%	41.6%	.2%	100.0%
		Satisfaction with how well guardrail is maintained	Count	10	65	407	295	25	802
			%	1.2%	8.1%	50.7%	36.8%	3.1%	100.0%
		Satisfaction with the traffic signals on highway system	Count	31	102	417	204	48	802
			%	3.9%	12.7%	52.0%	25.4%	6.0%	100.0%
		Satisfaction with how well highway lighting works	Count	24	151	439	172	16	802
			%	3.0%	18.8%	54.7%	21.4%	2.0%	100.0%
		Satisfaction with the maintenance of rest areas	Count	22	103	375	207	95	802
			%	2.7%	12.8%	46.8%	25.8%	11.8%	100.0%



## Q2b - Importance of maintenance categories

				Extremely unimportant	Unimportant	Important	Extremely important	Don't know / not sure	Total
Year of survey	2000	Importance of maintaining roadway surfaces	Count	3	12	160	457		632
			%	.5%	1.9%	25.3%	72.3%		100.0%
		Importance of maintaining drainage	Count	1	20	170	439	2	632
			%	.2%	3.2%	26.9%	69.5%	.3%	100.0%
		Importance of litter and trash removal	Count	7	64	270	290	1	632
			%	1.1%	10.1%	42.7%	45.9%	.2%	100.0%
		Importance of maintaining roadside vegetation	Count	74	204	242	103	9	632
			%	11.7%	32.3%	38.3%	16.3%	1.4%	100.0%
		Importance of snow and ice removal	Count	8	29	143	437	15	632
			%	1.3%	4.6%	22.6%	69.1%	2.4%	100.0%
		Importance of maintaining road stripes and pavement markings	Count	1	22	135	472	2	632
			%	.2%	3.5%	21.4%	74.7%	.3%	100.0%
		Importance of maintaining roadway signs	Count	4	26	168	433	1	632
			%	.6%	4.1%	26.6%	68.5%	.2%	100.0%
		Importance of maintaining guardrail	Count	6	51	194	376	5	632
			%	.9%	8.1%	30.7%	59.5%	.8%	100.0%
		Importance of maintaining traffic signals	Count	8	23	152	434	15	632
			%	1.3%	3.6%	24.1%	68.7%	2.4%	100.0%
		Importance of maintaining highway lighting	Count	5	52	208	360	7	632
			%	.8%	8.2%	32.9%	57.0%	1.1%	100.0%
		Importance of maintaining rest areas	Count	10	57	235	307	23	632
			%	1.6%	9.0%	37.2%	48.6%	3.6%	100.0%
	2005	Importance of maintaining roadway surfaces	Count	11	32	263	495	1	802
			%	1.4%	4.0%	32.8%	61.7%	.1%	100.0%
		Importance of maintaining drainage	Count	11	38	264	482	7	802
			%	1.4%	4.7%	32.9%	60.1%	.9%	100.0%
		Importance of litter and trash removal	Count	17	110	322	352	1	802
			%	2.1%	13.7%	40.1%	43.9%	.1%	100.0%
		Importance of maintaining roadside vegetation	Count	67	210	348	172	5	802
			%	8.4%	26.2%	43.4%	21.4%	.6%	100.0%
		Importance of snow and ice removal	Count	14	31	168	569	20	802
			%	1.7%	3.9%	20.9%	70.9%	2.5%	100.0%
		Importance of maintaining road stripes and pavement markings	Count	5	22	236	539		802
			%	.6%	2.7%	29.4%	67.2%		100.0%
		Importance of maintaining roadway signs	Count	8	25	253	516		802
			%	1.0%	3.1%	31.5%	64.3%		100.0%
		Importance of maintaining guardrail	Count	13	56	219	506	8	802
			%	1.6%	7.0%	27.3%	63.1%	1.0%	100.0%
		Importance of maintaining traffic signals	Count	11	44	215	515	17	802
			%	1.4%	5.5%	26.8%	64.2%	2.1%	100.0%
		Importance of maintaining highway lighting	Count	12	66	279	435	10	802
			%	1.5%	8.2%	34.8%	54.2%	1.2%	100.0%
		Importance of maintaining rest areas	Count	22	93	353	304	30	802
			%	2.7%	11.6%	44.0%	37.9%	3.7%	100.0%

## Q3b and 4b - What needs to be improves (open-ended)

Improvements needed	Improve/fix road surfaces/have higher quality road surfa....	Column %	1.9
	Road surfaces are	Column %	2.9
	Road surfaces are	Column %	1.4
	Road surfaces are	Column %	2.2
	Improve/fix the cracks	Column %	2.4
	Road surfaces have	Column %	10.6
	Repave road surfaces	Column %	2.9
	Other Roadway Surface	Column %	4.9
	Other Reflectors Mentions	Column %	2.6
	Have better signs	Column %	.4
	Have more illuminated	Column %	1.1
	Other Signs Mentions	Column %	7.0
	Have better lights/lighting	Column %	1.9
	Too dark/not enough	Column %	13.8
	Other Lighting Mentions	Column %	2.4
	Improve visibility (Unspec)	Column %	3.2
	Need red lights/traffic	Column %	5.9
	Need to maintain/clean	Column %	9.9
	Other Miscellaneous	Column %	7.2
	Improve snow	Column %	3.6
	Other Snow/Ice Removal	Column %	8.4
	Improve drainage/need	Column %	5.9
	Solve problem of	Column %	7.6
	Solve problem of	Column %	3.2
	Other	Column %	.9
	Improve sanitation/have	Column %	19.8
	Have public education	Column %	2.7
	Enforce/have stiffer	Column %	3.2
	Other Sanitation Mentions	Column %	3.6
	Add greenery/vegetation	Column %	4.5
	Maintain	Column %	5.7
	Improve weed control/cut	Column %	4.4
	Other	Column %	3.7
	Improve	Column %	1.2
	Need to paint/need to	Column %	4.0
	Other Miscellaneous	Column %	2.5
	Improve bathroom	Column %	4.5
	Other Rest Areas	Column %	5.1
	Ban/enforce regulations	Column %	1.1
	Other	Column %	1.5
	Expand road/add more	Column %	3.0
	Improve/fix guardrail/put	Column %	3.0
	Create jobs/hire	Column %	2.6
	Improve/cut down on	Column %	6.1
	Have better/more	Column %	10.5
	Use inmates/prisoners to	Column %	2.1
	Other Miscellaneous	Column %	19.1
	Nothing (DNDC)	Column %	22.6
	Don't Know	Column %	10.8

**Q5 - Overall rating of maintenance of state highways \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Overall rating of maintenance of state highways	Very poor	Count	8	18	26
		% within Year of survey	1.3%	2.2%	1.8%
	Fairly poor	Count	29	45	74
		% within Year of survey	4.6%	5.6%	5.2%
	Average	Count	217	311	528
		% within Year of survey	34.3%	38.8%	36.8%
	Above average	Count	302	348	650
		% within Year of survey	47.8%	43.4%	45.3%
	Excellent	Count	76	80	156
		% within Year of survey	12.0%	10.0%	10.9%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q6 - Rating of how maintenance crews respond to emergencies such as mud slides, floods, & items blocking the roadways \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Rating of how maintenance crews respond to emergencies such as mud slides, floods, & items blocking the roadways	Very poor	Count	6	15	21
		% within Year of survey	.9%	1.9%	1.5%
	Fairly poor	Count	12	16	28
		% within Year of survey	1.9%	2.0%	2.0%
	Average	Count	208	291	499
		% within Year of survey	32.9%	36.3%	34.8%
	Above average	Count	248	291	539
		% within Year of survey	39.2%	36.3%	37.6%
	Excellent	Count	158	189	347
		% within Year of survey	25.0%	23.6%	24.2%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q7 - Highway maintenance compared to the maintenance of local roads and streets in your area \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Highway maintenance compared to the maintenance of local roads and streets in your area	Much worse	Count	5	13	18
		% within Year of survey	.8%	1.6%	1.3%
	Not quite as good	Count	40	48	88
		% within Year of survey	6.3%	6.0%	6.1%
	About the same	Count	202	250	452
		% within Year of survey	32.0%	31.2%	31.5%
	Somewhat better	Count	177	281	458
		% within Year of survey	28.0%	35.0%	31.9%
	Considerably better	Count	208	210	418
		% within Year of survey	32.9%	26.2%	29.1%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q8 - Rating highway maintenance for WA compared to other states \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Rating highway maintenance for WA compared to other states	Much worse	Count	16	29	45
		% within Year of survey	2.5%	3.6%	3.1%
	Not quite as good	Count	51	88	139
		% within Year of survey	8.1%	11.0%	9.7%
	About the same	Count	229	308	537
		% within Year of survey	36.2%	38.4%	37.4%
	Somewhat better	Count	183	217	400
		% within Year of survey	29.0%	27.1%	27.9%
	Considerably better	Count	153	160	313
		% within Year of survey	24.2%	20.0%	21.8%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q9 - Should WSDOT continue to use herbicides to manage roadside vegetation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	155	10.8	19.3	19.3
	Yes	556	38.8	69.3	88.7
	Don't know	91	6.3	11.3	100.0
	Total	802	55.9	100.0	
Missing	System	632	44.1		
Total		1434	100.0		

**Q10 - Have you ever called or e-mailed WSDOT about a highway maintenance issue?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	740	51.6	92.3	92.3
	Yes	62	4.3	7.7	100.0
	Total	802	55.9	100.0	
Missing	System	632	44.1		
Total		1434	100.0		

**Q11 - Were you satisfied with the response from WSDOT?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	24	1.7	38.7	38.7
	Yes	36	2.5	58.1	96.8
	Don't know	2	.1	3.2	100.0
	Total	62	4.3	100.0	
Missing	System	1372	95.7		
Total		1434	100.0		

**Q12 - How many miles do you travel on state highways per week? \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
How many miles do you travel on state highways per week?	50 - 100 miles	Count	233	305	538
		% within Year of survey	36.9%	38.0%	37.5%
	101 - 150 miles	Count	97	106	203
		% within Year of survey	15.3%	13.2%	14.2%
	151 - 200 miles	Count	60	92	152
		% within Year of survey	9.5%	11.5%	10.6%
	201 - 250 miles	Count	44	69	113
		% within Year of survey	7.0%	8.6%	7.9%
	251 or more miles	Count	198	230	428
		% within Year of survey	31.3%	28.7%	29.8%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q13 - Approximately how many days per week do you use state highways? \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Approximately how many days per week do you use state highways?	1 day	Count	14	24	38
		% within Year of survey	2.2%	3.0%	2.6%
	2 days	Count	45	49	94
		% within Year of survey	7.1%	6.1%	6.6%
	3 days	Count	61	71	132
		% within Year of survey	9.7%	8.9%	9.2%
	4 days	Count	57	77	134
		% within Year of survey	9.0%	9.6%	9.3%
	5 days	Count	145	208	353
		% within Year of survey	22.9%	25.9%	24.6%
	6 days	Count	84	117	201
		% within Year of survey	13.3%	14.6%	14.0%
	7 days	Count	226	256	482
		% within Year of survey	35.8%	31.9%	33.6%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q14 - How long have you been a resident of Washington State? \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
How long have you been a resident of Washington State?	Less than 6 months	Count	6	15	21
		% within Year of survey	.9%	1.9%	1.5%
	6 months to 11 months	Count	2	8	10
		% within Year of survey	.3%	1.0%	.7%
	1 to 4 years	Count	40	35	75
		% within Year of survey	6.3%	4.4%	5.2%
	5 to 9 years	Count	46	52	98
		% within Year of survey	7.3%	6.5%	6.8%
	10 or more years	Count	538	692	1230
		% within Year of survey	85.1%	86.3%	85.8%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q15 - Type of area you live in \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Type of area you live in	Metropolitan	Count	150	237	387
		% within Year of survey	23.7%	29.6%	27.0%
	Suburban	Count	185	224	409
		% within Year of survey	29.3%	27.9%	28.5%
	Small town or rural	Count	297	341	638
		% within Year of survey	47.0%	42.5%	44.5%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q17 - Number of working motor vehicles \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Number of working motor vehicles	1	Count	91	135	226
		% within Year of survey	14.5%	16.8%	15.8%
	2	Count	265	325	590
		% within Year of survey	42.1%	40.5%	41.2%
	3	Count	155	198	353
		% within Year of survey	24.6%	24.7%	24.7%
	4	Count	63	95	158
		% within Year of survey	10.0%	11.8%	11.0%
	5	Count	32	24	56
		% within Year of survey	5.1%	3.0%	3.9%
	6	Count	7	16	23
		% within Year of survey	1.1%	2.0%	1.6%
	7 or more	Count	16	9	25
		% within Year of survey	2.5%	1.1%	1.7%
Total	Count	629	802	1431	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q18 - Is English the primary language spoken in this household?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	20	1.4	2.5	2.5
	Yes	780	54.4	97.3	99.8
	Don't know	2	.1	.2	100.0
	Total	802	55.9	100.0	
Missing	System	632	44.1		
Total		1434	100.0		

**Q19 - Other Household Primary Languages**

Other primary languages spoken	Chinese	Count	3
		Column %	15.0
	Russian	Count	2
		Column %	10.0
	Spanish	Count	6
		Column %	30.0
	Other	Count	9
		Column %	45.0



**Q20 - Age \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Age	Under 25	Count	44	42	86
		% within Year of survey	7.0%	5.2%	6.0%
	25 - 34	Count	68	114	182
		% within Year of survey	10.8%	14.2%	12.7%
	35 - 44	Count	114	157	271
		% within Year of survey	18.0%	19.6%	18.9%
	45 - 54	Count	157	208	365
		% within Year of survey	24.8%	25.9%	25.5%
	55 - 64	Count	116	164	280
		% within Year of survey	18.4%	20.4%	19.5%
	65 - 74	Count	92	72	164
		% within Year of survey	14.6%	9.0%	11.4%
	75 and older	Count	24	27	51
		% within Year of survey	3.8%	3.4%	3.6%
	Refused	Count	17	18	35
		% within Year of survey	2.7%	2.2%	2.4%
Total	Count	632	802	1434	
	% within Year of survey	100.0%	100.0%	100.0%	

**Q21 - Gender \* Year of survey Crosstabulation**

			Year of survey		Total
			2000	2005	
Gender	Male	Count	346	421	767
		% within Year of survey	54.7%	52.5%	53.5%
	Female	Count	286	381	667
		% within Year of survey	45.3%	47.5%	46.5%
Total		Count	632	802	1434
		% within Year of survey	100.0%	100.0%	100.0%